NOTES

1. Papers selected for inclusion in General Sessions will be available at the Conference in the following official languages of the United Nations: English, French, Russian and Spanish.

2. Papers selected for inclusion in Specialized Sessions will be available at the Conference in only one of the above official languages.

3. Summaries of all papers, as submitted by contributors, will be available at the Conference in the following official languages of the United Nations: English, French, Russian and Spanish.

4. Papers and summaries will not be available for general distribution in advance of the Conference. They will be published in advance in limited quantities only for the use of delegations of participating governments and of other authorized participants. Post-Conference publication and general distribution of the Conference Proceedings will follow United Nations practices as laid down by the United Nations Publications Board.

IMPROVEMENT OF PRODUCTION AND PRESERVATION METHODS IN AN UNDERDEVELOPED FISHERY THROUGH UPGRADING FISHING VESSELS, GEAR AND SANITARY PROCEDURES

by

Charles Butler, H. B. Allen and Lee Alverson
Bureau of Commercial Fisheries
U. S. Department of Interior
Washington, D. C.

1. Acre for acre, the world's oceans are potentially as fruitful as arable land but man derives only one percent of his food from the seas. Of the estimated potential annual yield of 500 billion pounds, the present harvest is only 80 billion pounds (1961). More important, less developed nations, as a whole, take only a relatively small percentage of the annual harvest. These countries, badly in need of food protein, have not yet been able to harvest, in significant quantities, the largely unexploited, self-reproducing food resource lying off their shores. This imbalance in the use of the ocean's wealth can be redressed through governmental formulation of national policy favoring the development of a fishery industry and implementation of a rational, coordinated, long-range plan for the systematic improvement and expansion of the existing fishing industry.

2. A workable plan must provide for a balanced, concurrent development of all phases of the industry, including charting of the best fishing grounds and determination of best fishing areas for various species, processing methods which will insure maximum utilization and benefit to the undernourished inhabitants, distribution of the product, and a training program in all these facets. In addition, financial studies should be made to insure mobilization of the necessary capital. Basic to providing protein from the marine environment are the gear and vessels used. Present fishing methods are in accordance with age-old customs and traditions. In a program for the increased production of fisheries products through improvement of fishing methods, the first 5 years would be concerned with improving the catching effectiveness of contemporary gear, instruction in the basic concepts of sanitation, and analysis of present distribution methods.

3. The primitive gear still used, such as pots and handlines, should be improved in design and materials to lengthen their fishing life and make more efficient use possible. Particular attention should be devoted to demonstrations of newly introduced gear and fish handling and processing techniques by experts who would also conduct training classes. This phase would be followed by the introduction of new gear of extremely simple types which could be used for expanding the harvest of the near shore fisheries as well as in fish handling and processing. Examples of these would be the extension of single handlines to longlines which could be used in shallow waters without mechanization, and the use of wet cloth for preserving the catch. During this initial phase every effort would be made to study fishing craft for the purpose of adapting simple, easy to operate outboard motors to these available hulls, and of upgrading the existing fish handling

and processing facilities.

4. Near the end of this 5 year period suitable outboard motors and preservation equipment would be introduced. Coincidentally, a traveling school for outboard and processing mechanics would be established; distribution and marketing clinics would also be established.

5. Based on the experience gained during the first 5 years, developments of the initial part of the second 5 years would be aimed at the introduction of fishing and processing gear for the establishment of offshore fishing operations. These operations would be carried on primarily on offshore banks and would require the introduction of more highly specialized vessels and fishing and processing techniques, including mechanized trolling, gill netting, purse seining, live bait fishing, salting, freezing and canning. In the final phase of the second 5 years, these latter methods would be the ultimate in the development of the fisheries resources as their use would be directed primarily at the harvest, processing and marketing of oceanic fisheries.

It should not be forgotten that in the more advanced areas of the world the mechanization of the fishing fleets has developed over a period of many years. In this developmental program particular attention would be paid to following and adopting the procedures which have been so successful in other areas.

S - 1586 E - Nov.1962 - 1,600